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Sustaining Corporate Growth Requires 'Big I' and 'small i' Innovation

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All companies, from major multinationals to start-ups, face a common challenge: how to grow their businesses so they can boost earnings and enhance the value of their shares. Far too often, however, firms find it difficult to sustain growth because they become risk averse and, as a result, opt for incremental product and service improvements instead of major initiatives, according to a study by a Wharton marketing professor.

[George S. Day](http://marketing.wharton.upenn.edu/people/faculty.cfm?id=9) (<http://marketing.wharton.upenn.edu/people/faculty.cfm?id=9>), who also serves as co-director of Wharton's Mack Center for Technological Innovation, says companies can avoid lackluster growth by better understanding the risks inherent in different levels of innovation and achieving a balance between -- using two terms he has coined -- BIG I innovation and *small i* innovation. In his study, Day discusses how executives can properly assess risks and then seek creative ways to reduce risk exposure.

Day, a consultant to many Fortune 500 companies, says his research is the outgrowth of years of thinking about the problems that companies face in trying to set and achieve growth targets. Growth -- particularly "organic" growth that comes from improving a company's performance from within rather than relying on acquisitions -- is so important that it is at the top of the agendas of some 80% of U.S. chief executive officers, according to Day.

"These executives know that the expectation of superior organic growth is the most important driver of enterprise value in capital markets," Day writes in the paper, titled "Closing the Growth Gap: Balancing BIG I and *small i* Innovation." It is also a less expensive way to grow because a firm typically pays a premium to acquire another business. Yet studies have shown that only 29% of managers of major corporations are highly confident they can reach their organic growth targets.

A combination of factors can make organic growth hard to sustain. For one thing, firms often find themselves in saturated, price competitive markets -- pressured by customers who themselves are squeezed -- and are forced to compete for incremental share gains with rivals who follow similar strategies. One answer to this challenge is to explore new "blue ocean" markets with new business models and offer a better customer experience. While this is an appealing growth path, the returns may not compensate for the higher risk and long delay before any returns are realized. This approach also does not account for the consistent growth records of Wal-Mart, Dell and IKEA, which have been methodically leveraging their low-cost business models in closely adjacent markets.

In other cases, disappointing growth can stem from organizational impediments (such as short-term incentives that subvert long-term objectives), risk-averse cultures and inferior innovation capabilities. Day says 80% of CFOs of major corporations would reportedly hold back on discretionary spending designed to fuel growth if they were likely to miss their quarterly earnings target.

The combined effect of these external and internal impediments to growth is that incremental *small i* innovation displaces BIG I innovation growth initiatives. *Small i* projects make up 85% to 90% of the average corporate development portfolio. These projects are necessary for continuous improvement but do not change the competitive balance or contribute much to profitability. By contrast, 14% of a sample of business launches that were substantial innovations accounted for 61% of profits, according to a study cited in Day's paper.

This bias toward safer, incremental line extensions and product improvements seems to be intensifying. Between 1990 and 2004, the proportion of "new-to-the-world, true innovations" in development portfolios dropped from 20% to 11.5%, Day writes. Even the less ambitious development of products "new to the company" dropped by a third.

Crippling Consequences

There are any number of reasons why companies are placing a growing emphasis on *small i* innovations. Long established, incumbent firms may suffer from tunnel vision, that is, they miss early signals of market opportunities that offer openings for rivals. For instance, by the time of its initial public offering in 2004, Google was already a formidable rival of Microsoft, Amazon and Yahoo. Why didn't they see the same opportunity sooner?

In other cases, firms may opt for "exploitation" activities over "exploration" activities. "There is a well-known organizational trade-off between activities that exploit existing capabilities and those that explore new market spaces and create breakthrough innovations that stretch capabilities," Day writes. "This uneasy trade-off is tilted toward exploitation by process management methods that emphasize the reduction of variance in organization processes. When the mindset and methods of business process re-engineering, Six Sigma and ISO 9000, are applied to innovation processes, they tend to displace the inherently divergent and variance increasing activities needed for

creative exploration. Slowly -- and perhaps imperceptibly -- the choices of research projects to select and products to develop are steered toward the incremental and more certain opportunities."

At other times, companies may succumb to short-term thinking. Most financial yardsticks used to choose which development projects to fund are biased against the lengthy pay-offs and uncertainty of BIG I innovations.

Finally, longer-term investments in innovation may decrease when companies use up scarce development time and resources to react to urgent, short-term requests from customers and salespeople. "These requests stem from fragmenting markets, demanding channel partners and new forms of competition that require a proliferation of product offerings and accelerated development cycles," Day writes. "Meanwhile, R&D budgets are being held constant or tightened to meet short-term earnings targets. This leaves firms with more projects than they can handle, and pressing *small i* projects get priority."

Companies that avoid BIG I initiatives also believe that the potential rewards will be received too far in the future at too high a risk. But this risk aversion imposes costs that need to be understood and contained. For example, while the actual rewards may be realized far in the future, the equity markets account for them in their expectations of earnings. If the firm is viewed as mired in slow-growth markets, vulnerable to emerging technologies and lacking a compelling story about its future growth thrust, its stock price will suffer.

Indeed, risk aversion may have even more crippling consequences. "Certainly the probability of failure goes up sharply when the business ventures beyond incremental initiatives in familiar markets," according to Day. "But this should not be an excuse for passivity. It's healthier to properly assess the risks and then seek creative ways to reduce the risk exposure."

McDonald's vs. GE

In his paper, Day includes a "risk matrix" diagram that can help firms assess the probability of failure of different growth paths and calibrate the risks of unfamiliar markets and technologies. In essence, the matrix shows that it is far less risky for a business to launch a new product or technology into a familiar served market than to adapt the current product to a new end-use market.

"Market risks are much greater than product risks because there are more dimensions of uncertainty, including competitors, channels and consumers," writes Day. "If the market is entirely unfamiliar, the firm doesn't even know what it doesn't know -- and the knowledge is hard to acquire. Market risks are not only less controllable than technology risks, they tend to be confronted much later in the product development process, and are harder to resolve. A further complication is that an existing brand name has no meaning in a 'new-to-the-company' market. It is not simply a lack of awareness. Because the prospective buyers lack any experience, they view the new entrant as risky and have to be given special inducements to try the new product."

For example, McDonald's abortive effort to offer pizza in its restaurants was initially viewed as a "related product" for the current market. But pizza was actually a "new-to-the-company" product because it didn't fit the basic service delivery model. "No one could figure out how to serve a pizza in 30 seconds or less," according to Day. "This meant that service flow rates were disrupted, and pizzas couldn't be served through the drive-in window. The post-mortem of the failure revealed that the brand name didn't give them permission to offer pizza. They lacked credibility."

Day says GE is an example of a firm that has struck the right balance in working to achieve organic growth by growing on a number of fronts. After he replaced Jack Welch, CEO Jeff Immelt boosted the organic growth goal from 5% to 8% per year, which translates into finding an additional \$3.4 billion in organic growth annually. Many moves were made within GE to encourage fresh thinking. These ranged from diversifying the top ranks with outsiders, in a break from the company's promote-from-within history, to keeping executives in their positions longer so they become immersed in their industries, and then tying more of their compensation to new ideas, improved customer satisfaction and top-line growth.

The leaders of each GE business were required to submit at least three "Imagination Breakthrough" proposals per year promising at least \$100 million in additional growth. Day notes that such growth initiatives, which offer true breakthrough potential, are awkward to manage within the constraints of the existing organization. There will inevitably be conflicts over resource allocation, with *small i* initiatives gaining the upper hand. Yet the fledgling Big I initiatives may need to share resources, such as brand presence, manufacturing expertise or market access, with the established units.

An "ambidextrous" solution to the tension between *small i* and BIG I initiatives is to "house the initiative in a structurally independent unit with its own processes, structures and culture, but still integrated within the existing senior management hierarchy," according to Day's paper. "The lead role for the 'Imagination Breakthrough' growth initiative within GE was given to the marketing team within each of the 11 business units, while holding the business leaders accountable for results. This is a startling departure for a company with a belief that superior products and technology are what really count. Until recently, there were no marketers among the senior ranks and no coherent approach to marketing beyond building communication programs and designing product launches."

The "Imagination Breakthrough" effort aims to shift the balance toward BIG I growth initiatives by giving the organization permission to break away from the tyranny of past success and take calculated risks with departures from the way the business has been run. By early 2006, there were about 100 growth initiatives underway within GE, ranging from business-model innovations and new ways to segment and serve the global energy market, to products for new market spaces, such as bio-detection of security threats and small super-efficient jet engines for the next generation of air taxis, according to Day.

Preliminary projections were for an extra \$33 billion to \$35 billion of top-line growth from three to five years in the future. GE's 35 best projects are subject to monthly CEO reviews, a strong signal of commitment. This procedure also encourages the sharing of best practices and the further search for cross-division business opportunities.

The Praxair Case

Another company with a noteworthy approach to organic growth is Praxair, a Fortune 300 global producer of industrial gases based in Danbury, Conn.


In 2003, Praxair set out to find \$2 billion in revenue growth by 2008, Day says. One half was to come from acquisitions; the other half required double-digit organic growth of \$200 million per year. This was far beyond the annual growth that could be realized from repackaging helium, hydrogen, oxygen and other gases. So the company broke down its organic growth into actionable categories: The first 15% would come from incremental growth in the base business and new channels for serving current markets; the rest would come from new services, such as nitrogen injection of oil and gas wells, servicing the helium coolant used in magnets in magnetic resonance imaging machines and developing new reactor cooling and nitrogen injection cooling methods for the bioscience industry.


"These initiatives grew out of intimate knowledge of changing customer needs that could be met with Praxair's existing capabilities," writes Day. "The lead role in exploring the market, articulating and screening the opportunities, and orchestrating the specific projects was assigned to marketing, with sustained top management support and oversight. As a clear signal of commitment, the CEO of Praxair spent one day per quarter reviewing the growth prospects for each business." Day adds that the pay-off was immediate: The \$200-million growth target was exceeded by \$30 million in 2004.

Day says that the ideas presented in his paper began to come together several years ago when he attended a CMO summit conference on innovation sponsored by Wharton, McKinsey and the Marketing Science Institute. "There was a persistent theme to the conversation: Our companies have scarce resources and we're always pressured to think about the short term," Day notes. "At the same time, I had been reading about how process management methods, such as Six Sigma, tend to cut down on a company's willingness to take risks. It then occurred to me that maybe there was an increase in the tendency for companies to rely too heavily on what I call *small i* incremental innovations like product-line extensions, product upgrades and feature improvements.

"If you have constrained budgets, these incremental efforts tend to soak up a lot of that budget at the expense of BIG I projects, which are risky and long term -- so long term, in fact, that senior managers may no longer be with the company once the project finally is completed. Then I read a great study by another researcher, who demonstrated persuasively that there was a relative shrinking of innovations in corporate development portfolios. So the evidence was mounting that there was a trend working against Big I innovation. That's when I asked, 'How can companies fight that tendency?'"

The antidote described in the paper, Day says, "is a disciplined process for realistically assessing the growth gap to be filled, expanding the search for opportunities, calibrating the risks and using the latest thinking on screening, real option analysis and partnering to contain but not avoid these risks."

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